Abstract

A lightweight and compact headlamp adjuster is constructed primarily from plastic materials. The adjuster may include a VHAD that is non-recalibratable after the headlamp aim is factory set. The adjuster includes an input shaft that engages a gear located within a housing.

When the input shaft is rotated, a ball stud moves linearly to adjust the headlamp to which it is connected. The adjuster is not subject to over-adjustment when it includes a clutching mechanism provided by the interaction of the ball stud with the gear.